

REMARKS

Claims 1-14 are pending. By this Amendment, claims 1, 5, 11, 12, and 14 are amended.

Allowed Claims

Claims 8-10 are noted as allowed.

Claim Rejections – 35 U.S.C. § 103

Independent Claim 1

Independent claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Glorioso et al, U.S. Patent No. 6,137,423.

Independent claim 1 has been amended to clarify that the present invention is a meter reading system with base stations that are provided with the ability to receive any of the high power frequency hopping spread spectrum signals that are transmitted by any of the end point encoder transmitter devices or any of the intermediate transceiver units. The present invention utilizes a highly developed communication and messaging scheme to enable this ability. See the specification at page 38, last paragraph through page 39, line 2 However, the '423 patent provides for a system whereby only ONE of the base stations is enabled in the field to recognize a wireless signal, see Col. 1, Lines 59-65 and Col. 3, Lines 34-38; a much less developed communication scheme than that provided by the present invention.

Because the '423 patent does not teach or suggest a plurality of base stations each with the ability to receive a wireless signal from any of a plurality of end point encoder transmitter devices, Applicants submit that rejection under 35 U.S.C. § 103 should be withdrawn.

Claims 2-4 depend from independent claim 1 and have each been rejected under 35 U.S.C. § 103. Applicants do not specifically address these rejections due to the belief that independent claim 1 is an allowable format. The choice to not specifically address the rejections to claim 2-4 does not imply agreement or disagreement with the rejections, rather Applicants request that right to traverse these rejections at a later date if so desired.

Independent Claim 5

Independent claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Nap et al U.S. Patent No. 6,246,677 in view of John Proakis, "Digital Communications," 4<sup>th</sup> Edition, August 15, 2000.

Independent claim 5 has been amended to indicate that all processor functions are performed within the first and second processors. The first processor not only runs continuously and controls the operation of the radio frequency sub-system, but it provides the message to be sent and the frequency upon which the message should be sent to the second processor; the second processor of the claimed invention is not required to format the message to be sent. The system of Nap is a three processor system, having a supervisory microcontroller, a communication microcontroller, and a spread spectrum processor. The supervisory microcontroller accumulates pulses from the meter and transmits the meter data to the communication controller. The communication controller manages radio frequency communication and transmits the meter data from the supervisory controller to the spread spectrum processor (see Fig. 7). The spread spectrum processor performs spread spectrum encoding of data received from the communication microcontroller and provides it to the RF transmitter, see Col. 8, Lines 59-62. In other words, the Nap invention does not provide the

message to be transmitted and the frequency on which to transmit the message to the second controller, as claimed in claim 5, rather the message itself must be developed at the spread spectrum processor.

Applicants submit that the Nap invention does not teach or suggest a two processor digital sub-system wherein the first processor provides the message to be transmitted and the frequency on which to transmit the message to the second processor of the digital sub-system. As such, Applicants respectfully request that the rejection to independent claim 5, and its dependent claims 6 and 7, under 35 U.S.C. § 103(a) be withdrawn.

Independent Claim 11

Independent claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Glorioso et al, U.S. Patent No. 6,137,423.

Independent claim 11 has been amended to further define the installation mode of the system. Specifically, the claim has been amended to recite that installation mode uses a high speed frequency spread spectrum mode to rotate through all of the available acquisition channels to determine which of the acquisition channels the meter end point encoder transmitter device is to transmit upon. As noted within the Office Action, the RMI of the system of the ‘423 patent does not rotate through its frequency channels upon installation, rather this is reserved for normal operation. Upon installation, the RMI of the ‘423 patent is “allowed to use only three channels for installation.” Applicants submit that the ‘423 patent does teach or suggest an end point installation mode, that performs a high speed a rotation through all available acquisition channels to determine which it should transmit upon. As such, Applicants request that the rejection of independent claim 11 under 35 U.S.C. § 103(a) be withdrawn.

Independent Claim 12

Independent claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Glorioso et al, U.S. Patent No. 6,137,423.

Independent claim 12 has been amended to clarify that the buckets of consumption data are transmitted in a single transmission and each bucket represents a *different but sequential* period of time of consumption data, wherein the time periods of consumption data are measured based on the current time of the meter end point encoder transmitter device. The benefit of the buckets of data is that base unit is able to go back to a desired point in time and reconstruct the consumption data no matter the time at which the base unit actually receives consumption data transmission (see the specification at page 22, lines 1-10) This is a feature not provided by the Glorioso et al. reference. Applicants submit that the '423 patent does teach or suggest sequentially timed buckets of consumption data as claimed by the present invention. As such, Applicants request that the rejection of independent claim 11 under 35 U.S.C. § 103(a) be withdrawn.

Claim 13, dependent upon claim 12, has been noted as allowable if incorporated into the base claim.

Independent Claim 14

Independent claim stands rejected under 35 U.S.C. §103(a) as being unpatentable over Glorioso et al, U.S. Patent No. 6,137,423, as applied to claim 1, and further in view of Meyer et al., U.S. Patent No. 6,778,099.

Similar to independent claim 1, independent claim 14 has been amended to clarify that the present invention is a meter reading system with base stations that are provided with the

ability to receive any of the high power frequency hopping spread spectrum signals that are transmitted by any of the end point encoder transmitter devices or any of the intermediate transceiver units. The present invention utilizes a highly developed communication and messaging scheme to enable this ability. See the specification at page 38, last paragraph through page 39, line 2 However, the '423 patent provides for a system whereby only ONE of the base stations is enabled in the field to recognize a wireless signal, see Col. 1, Lines 59-65 and Col. 3, Lines 34-38; a much less developed communication scheme than that provided by the present invention.

Because the '423 patent does not teach or suggest a plurality of base stations each with the ability to receive a wireless signal from any of a plurality of end point encoder transmitter devices, Applicant submit that rejection under 35 U.S.C. § 103 should be withdrawn.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



Kimberly K. Baxter  
Registration No. 40,504

Customer No. 24113  
Patterson, Thuente, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 349-5750